

Amendments To The Claims:

Please amend the claims as shown.

1 – 10 (canceled)

11. (currently amended) A method for controlling a component of a technical plant by a proportional-plus-integral (PI) controller that has control parameters including a control ratio indicative of a proportional gain and an integral-action time, comprising:

defining a value of the integral-action time;

defining an initial value of the control ratio;

defining a set value of a control quantity of the component;

inputting into the controller the value of the integral-action time, the initial value of the control ratio and the set value of the control quantity;

determining the actual value of a controlled variable during operation of the technical plant;

~~changing~~ adapting the value of the control ratio relative to a time response of the actual value until the actual value of the controlled variable remains within a tolerance band relative to the set value during operation of the technical plant; and

reducing the value of the control ratio if the time response of the actual value has a dwell time during which the actual value of the controlled variable has a value within varies within the tolerance band, that issaid dwell time being smaller than a first defined time period during operation of the technical plant, wherein a duration of the dwell time relative to a duration of the first defined time period is selected to determine a sufficiently fast rate of change of the controlled variable relative to a time constant of the component, and wherein the reduction of the value of the control ratio is configured to reduce the rate of change of the controlled variable.

12. (currently amended) The method in accordance with claim 911, wherein the integral-action time is determined from the system time constants.

13. (currently amended) The method in accordance with claim 911, wherein the integral-action time is determined from the sum of the system time constants of the component to be controlled.

14. (currently amended) The method in accordance with claim 911, wherein the control ratio is reduced if a first change rate of the actual value is greater than a second change rate of the set value.

15. (currently amended) The method in accordance with claim 911, wherein the control ratio is increased if the time response of the actual value has a rise time that includes the period from the start of a change of the set value until reaching an instantaneous value of the actual value within the tolerance band that is greater than a second defined time period.

16. (currently amended) A proportional-plus-integral (PI) controller for controlling a component of a technical plant, comprising:

a logic element having a control ratio indicative of a proportional gain and an integral-action time;

a first controller input adapted to provide the controller ~~can be supplied~~ with a defined value for the integral-action time;

a second controller input adapted ~~so to provide~~ the controller ~~can be supplied~~ with the control ratio;

a third controller input adapted ~~so to provide~~ the controller ~~can be supplied~~ with a set value of a control quantity of the component; and

an ~~adaption~~adaptation device that ~~constantly~~ applies the actual value of a controlled variable during the operation of the technical plant so ~~that the adaption device and the value of the control ratio can be constantly changed adapted~~ relative to the time response of the actual value until the actual value of the controlled variable remains within a tolerance band relative to the set value, ~~wherein with the value of the control ratio being is~~ reduced by the ~~adaption~~adaptation ~~unit device~~ if the time response of the actual value has a dwell time during which the actual value of the controlled variable ~~accepts a value within~~ varies within the tolerance band, ~~that issaid dwell time being~~ smaller than a first defined time period, ~~wherein a duration of the dwell time relative to a duration of the first defined time period is selected to determine a sufficiently fast rate of change of the controlled variable relative to a time constant of the component, and wherein the reduction of the value of the control ratio by the adaptation device is configured to reduce the rate of change of the controlled variable.~~

17. (currently amended) The ~~feedback~~ controller in accordance with claim 1416, wherein the integral-action time is determined from system time constants.

18. (currently amended) The ~~feedback~~ controller in accordance with claim 1416, wherein the integral-action time is determined from the sum of the system time constants of the component to be controlled.

19. (currently amended) The ~~feedback~~ controller in accordance with claim ~~14~~16, wherein the control ratio is reduced by the ~~adaption~~adaptation unit if additionally a first change rate of the actual value is greater than a second change rate of the set value.

20. (currently amended) The ~~feedback~~ controller in accordance with claim ~~14~~16, wherein the control ratio is increased by the ~~adaption~~adaptation unit if the time response of the actual value has a rise time that includes the time period from the start of a change of the set value until achievement of an instantaneous value of the actual value within the tolerance band, that is greater than a second defined time period.

21. (currently amended) A method for controlling a component of a technical plant by a controller, the method comprising:

- defining and holding an integral-action time control parameter constant;
- defining an initial value of a control ratio indicative of a proportional gain;
- defining a set value of a controlled variable of the component that is changeable during operation of the technical plant;
- determining an actual value of a controlled variable;
- controlling the actual value of the controlled variable to remain within a tolerance band relative to the changing set value during operation of the technical plant; and
- reducing the control ratio if a change rate of the actual value is greater than a change rate of the set value.